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10/615,470	07/08/2003	Patricia Wilson-Nguyen	FM-220J	9332

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EXAMINER

PIZIALI, ANDREW T

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 04/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/615,470

Applicant(s)

WILSON-NGUYEN ET AL.

Examiner

Andrew T. Piziali

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 22-31 is/are pending in the application.
- 4a) Of the above claim(s) 8-19, 22, 23 and 27-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 20 and 24-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The amendment filed on 2/21/2006 has been entered. The examiner has withdrawn the objection to the specification based on the amendments to the specification. The examiner has withdrawn the rejection of claim 21 based on the cancellation of claim 21.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,350,129 to Gorlick in view of USPN 6,767,218 to Marmaropoulos.

Regarding claims 1-5, 24 and 26, Gorlick discloses a textile electronic connection system comprising a woven textile ribbon including integrated transmission elements running the length of the ribbon to transmit data and/or power along the length of the ribbon and a fastener on the ribbon for connecting the ribbon to another ribbon or device (see entire document including column 1, line 44 through column 2, line 10, column 4, lines 17-58 and Figure 3).

Gorlick is silent with regards to specific end connectors, therefore, it would have been obvious to look to the prior art for conventional connectors. Marmaropoulos provides this conventional teaching showing that it is known in the wearable electronic device art to use a

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fastener including a male portion (11), and a female portion (12), wherein the male portion includes a deformable element (15) which releasably locks the male and female portions together, and a connector (20) integrated with the fastener portions and connected to the integrated transmission elements to quickly allow connection and disconnection in a robust and reliable fashion (see entire document including column 1, lines 12-34, column 3, lines 12-20, and Figures 1-2). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the end connectors from the connectors taught by Marmaropoulos, motivated by the expectation of successfully practicing the invention of Gorlick and because the connectors are mechanical strong and easy to operate (column 1, lines 35-40).

Regarding claims 2-5, 24 and 26, Marmaropoulos discloses that the connectors may include deformable prongs (15) and that the female portion of the fastener may include recesses (16) that receive the prongs (see Figures 1-2 and column 3, lines 12-20).

Regarding claims 3-5, 24 and 26, Marmaropoulos discloses that one portion of the connector (15) is disposed between the deformable prongs of the male portion of the fastener and the other portion of the connector (25) is disposed between the recesses of the female portion of the fastener (see Figures 1-2).

Regarding claims 4 and 5, Marmaropoulos discloses that system includes a guide channel in the female portion of the fastener about the connector portion for guiding the connector portions together in only one direction (see Figures 1-2).

Regarding claims 24 and 26, Gorlick discloses that separate straps can be interconnected (column 4, lines 39-49).

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4. Claim 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,350,129 to Gorlick in view of USPN 6,767,218 to Marmaropoulos as applied to claims 1-5, 24 and 26 above, and further in view of USPN 6,522,531 to Quintana et al. (hereinafter referred to as Quintana).

Gorlick discloses that the wearable electronic device may function as an effective power bus and/or data communication network (column 4, lines 19-23), including use as an internet network (column 5, lines 46-50), but Gorlick does not mention specific connector end connections. Gorlick is silent with regards to specific connect end connections, therefore, it would have been necessary and thus obvious to look to the prior art for conventional connector end connections. Quintana provides this conventional teaching showing that it is known in the electronic wearable device art to use USB and/or Lemo connector end connections (see entire document including column 1, lines 15-20, column 3, lines 46-61, column 4, lines 31-38, and column 5, lines 26-35). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the connector end connections from USB or Lemo connector end connections motivated by the expectation of successfully practicing the invention of Gorlick.

5. Claims 20 and 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,350,129 to Gorlick in view of USPN 6,767,218 to Marmaropoulos as applied to claims 1-5, 24 and 26 above, and further in view of USPN 2,021,111 to Wheat.

Gorlick does not specifically mention an overmolded portion, but Wheat discloses that it is known in the wearable electric device art to overmold a portion onto the end of a connector (Figure 4 between (10) and (4)). It would have been obvious to one having ordinary skill in the

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art at the time the invention was made to overmold a portion onto the end of each the connector, as taught by Wheat, because the overmolded portion would provide added strength and durability.

6. Claims 1-5, 20 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,350,129 to Gorlick in view of USPN 2,021,111 to Wheat.

Regarding claims 1-5, 20 and 24-26, Gorlick discloses a textile electronic connection system comprising a woven textile ribbon including integrated transmission elements running the length of the ribbon to transmit data and/or power along the length of the ribbon and a fastener on the ribbon for connecting the ribbon to another ribbon or device (see entire document including column 1, line 44 through column 2, line 10, column 4, lines 17-58 and Figure 3).

Gorlick is silent with regards to specific end connectors, therefore, it would have been obvious to look to the prior art for conventional connectors. Wheat provides this conventional teaching showing that it is known in the wearable electric device art to use a fastener including a male portion (12), and a female portion (10), wherein the male portion includes a deformable element (15 and/or 17) which releasably locks the male and female portions together, and a connector (13) integrated with the fastener portions and connected to the integrated transmission elements to quickly allow connection and disconnection in a robust and reliable fashion (see entire document including column 2, lines 14-38, column 3, lines 6-37, and Figures 3-4).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the end connectors from the connectors taught by Wheat, motivated by the expectation of successfully practicing the invention of Gorlick and because the connectors would protect the user from accidental short circuiting (column 1, lines 4-9).

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Regarding claims 2-5 and 24-26, Wheat discloses that the connectors may include deformable prongs (15 and/or 17) and that the female portion of the fastener may include recesses (16) that receive the prongs (see Figures 3-4).

Regarding claims 3-5 and 24-26, Wheat discloses that one portion of the connector (13) is disposed between the deformable prongs of the male portion of the fastener and the other portion of the connector (14) is disposed between the recesses of the female portion of the fastener (see Figures 3-4).

Regarding claims 4 and 5, Wheat discloses that system includes a guide channel (socket walls) in the female portion of the fastener about the connector portion for guiding the connector portions together in only one direction (see Figures 3-4).

Regarding claims 20 and 25, Wheat discloses that the connector includes an overmolded portion (Figure 4 between (10) and (4)).

Regarding claims 24-26, Gorlick discloses that separate straps can be interconnected (column 4, lines 39-49).

7. Claim 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,350,129 to Gorlick in view of USPN 2,021,111 to Wheat as applied to claims 1-5, 20 and 24-26 above, and further in view of USPN 6,522,531 to Quintana.

Gorlick discloses that the wearable electronic device may function as an effective power bus and/or data communication network (column 4, lines 19-23), including use as an internet network (column 5, lines 46-50), but Gorlick does not mention specific connector end connections. Gorlick is silent with regards to specific connect end connections, therefore, it would have been necessary and thus obvious to look to the prior art for conventional connector

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end connections. Quintana provides this conventional teaching showing that it is known in the electronic wearable device art to use USB and/or Lemo connector end connections (see entire document including column 1, lines 15-20, column 3, lines 46-61, column 4, lines 31-38, and column 5, lines 26-35). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the connector end connections from USB or Lemo connector end connections motivated by the expectation of successfully practicing the invention of Gorlick.

Response to Arguments

8. Applicant's arguments filed 2/21/2006 have been fully considered but they are not persuasive.

The applicant asserts that Gorlick fails to teach or suggest transmission elements running the length of the ribbon because Gorlick discloses that the wires may be separated by gaps (Figure 3). The examiner respectfully disagrees.

Gorlick teaches that said gaps “can be formed” and that by doing so electrical isolation between various segments of the wires “can be created” for configuring desired electrical routing (column 2, lines 52-66). Gorlick clearly teaches that the gaps are not a necessity, rather, the gaps are simply present in one embodiment of the disclosed invention. Gorlick specifically states that the strap comprises two (2) parallel conductive wires (column 2, lines 55-56 and column 5, lines 46-50), therefore, Gorlick teaches that the wires may not possess said gaps. Gorlick also discloses that “each conductor pair” may be bonded together at the ends of each webbing strap segment to produce “two single conductors” (column 3, lines 40-44), therefore, Gorlick once

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again teaches that the transmission elements may run the length of the ribbon without the presence of gaps. In addition, Gorlick teaches that an end connector may be attached to the ends of the webbing wires to couple wire segments together (column 4, lines 56-58), therefore, the resulting product of a strap with gaps, but connected at the ends, would be an integrated transmission element running the length of the ribbon.

The applicant asserts that Gorlick is not silent regarding end connectors and therefore there is no motivation to combine references. The examiner respectfully disagrees. Gorlick mentions center connectors, but Gorlick does not appear to clearly disclose using the center connectors as end connectors. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the end connectors of Gorlick from the connectors taught by Marmaropoulos or Wheat, motivated by the expectation of successfully practicing the invention of Gorlick.

Assuming *arguendo*, that Gorlick does clearly disclose the use of the center connectors as end connectors, it still would have been obvious to use the connectors disclosed by Marmaropoulos or Wheat. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the end connectors of Gorlick from the connectors taught by Marmaropoulos, because the connectors are mechanical strong and easy to operate (see column 1, lines 35-40 of Marmaropoulos). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the end connectors of Gorlick from the connectors taught by Wheat, because the connectors would protect the user from accidental short circuiting (see column 1, lines 4-9 of Wheat).

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T. Piziali whose telephone number is (571) 272-1541. The examiner can normally be reached on Monday-Friday (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

atp

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ANDREW T. PIZALI
PATENT EXAMINER